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### NOTICE OF ALLOWANCE AND FEE(S) DUE

22852 7590 09/23/2009 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNE LLP

901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 EXAMINER

LIN, KUANG Y

ART UNIT PAPER NUMBER

1793 DATE MAILED: 09/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,965	06/15/2006	Minoru Hirata	04632,0070	7716

TITLE OF INVENTION: METHOD AND APPARATUS FOR MOLDING AN UPPER AND A LOWER MOLD HAVING NO FLASK, AND A METHOD FOR REPLACING A MATCH PLATE USED THEREFOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further co indicated unless corrected maintenance fee notification	orm should be used for orrespondence including below or directed others.	or trang the	smitting the ISSU Patent, advance of in Block 1, by (a					hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDEN	CE ADDRESS (Note: Use Blo	ock I for	any change of address)	F	ote: A certificate o ee(s) Transmittal. The opers. Each addition	mailing is certical paper of mailing	g can only be used for ficate cannot be used for tr, such as an assignme tiling or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, must
	AVENUE, NW		BOW, GARR	ETT & DUNNER	Ce	rtificat	e of Mailing or Trans	g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
Wilding to 1014,	DC 20001-4-15							(Depositor's name)
								(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
10/582,965 TITLE OF INVENTION: FOR REPLACING A MA				Minoru Hirata G AN UPPER AND A	LOWER MOLD HA	VING	04632.0070 NO FLASK, AND A !	7716 METHOD
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	E FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	12/23/2009
EXAMIN	NER		ART UNIT	CLASS-SUBCLASS	7			
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1. Change of corresponden CFR 1.363.  Change of corresponden CFR 1.363.  defress form PTO/SB/ —Tee Address' indic PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN PLEASE NOTE: Unlessor recordation as set forth (A) NAME OF ASSIGN	ndence address (or Cha 122) attached. ation (or "Fee Address" or more recent) attach D RESIDENCE DAT! ss an assignee is identi in 37 CFR 3.11. Comp	nge of 'Indiced. Us	Correspondence ation form e of a Customer		to 3 registered pate tively, igle firm (having as r agent) and the nar tiorneys or agents. I be printed. type) patent. If an assign assignment.	a memi nes of u f no nar	per a 2pp to a 3	ocument has been filed for
Please check the appropria	te assignee category or	catego	ories (will not be pr	inted on the patent):	Individual 🔲 (	Corporat	ion or other private gro	oup entity Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				A. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)    A check is enclosed.   Payment by credit card. Form PTO-2038 is attached.   The Director is brerby authorized to charge the required fee(s), any deficiency, or credit any overpoyment, to Depoint Account Number (enclose an extra copy of this form).				
5. Change in Entity Statu  a. Applicant claims	SMALL ENTITY statu	s. See	37 CFR 1.27.	b. Applicant is no I				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requested States of the United States)	ired) tes Pat	will not be accepted ent and Trademark	d from anyone other that Office.	n the applicant; a res	istered	attorney or agent; or th	ne assignee or other party in
Authorized Signature _					Date			
Typed or printed name								
This collection of informat an application. Confidentis submitting the completed this form and/or suggestion Box 1450, Alexandria, Vir Alexandria, Virginia 2231:	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur- ginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C USPT den, sl NOT	11. The informatic 122 and 37 CFR O. Time will vary hould be sent to th SEND FEES OR	on is required to obtain on 1.14. This collection is depending upon the in the Chief Information Off COMPLETED FORMS	r retain a benefit by estimated to take 12 lividual case. Any c icer, U.S. Patent and TO THIS ADDRES	the pub minute ommen I Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of times ark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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10/582,965	06/15/2006	Minoru Hirata	04632.0070	7716	
22852 7	590 09/23/2009	EXAMINER			
FINNEGAN, HI	ENDERSON, FARAI	LIN, KUANG Y			
LLP		ART UNIT	PAPER NUMBER		
901 NEW YORK WASHINGTON,		1793			
"TESTINGTON,	DC 20001-F13	DATE MAILED: 00/23/2009			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 502 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 502 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/582,965 HIRATA ET AL. Notice of Allowability Examiner Art Unit Kuana Y. Lin 1793 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment of July 23, 2009. The allowed claim(s) is/are 1-9,11 and 19-24. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 7/23/09 8. T Examiner's Statement of Reasons for Allowance ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material □ Other .

/Kuang Y. Lin/ Primary Examiner. Art Unit 1793